

# Liking to be liked: imitation, familiarity and pedagogy in the first years of life

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This paper offers a review of the literature on the role of imitation in the earliest stages of social interaction between babies and familiar partners. The review focuses on the ways in which reciprocal imitation marks familiar relationships that provide special contexts for babies to engage actively and exuberantly in the construction of a shared culture. Because adults' perception of a baby's actions and intentions are filtered by the adult's experience of living within a particular culture, babies can obtain valuable information about this culture from the differences between what they do and how familiar adults respond to them. As they become increasingly interested in the social meaning of people's behaviour, infants also become more sensitive about how their own actions may be interpreted, showing pride and delight when their intentions are realised and embarrassed withdrawal when their efforts fail. When very young children are observed in unfamiliar contexts and when they are cared for and educated in professional settings, they may have relatively few opportunities for lively, joyful exchanges with reassuringly familiar partners and this can distort adults' perceptions of 'normal' infant behaviour. It is argued that adults' attentive interest in mutually enjoyable exchanges with young children is an important difference between humans and other apes and provides an essential foundation for pedagogy and for children's active participation in a shared culture.

Keywords: Imitation; Familiarity; Pedagogy; 'Like me'; Emotions of companionship

#### Introduction

The study of very young children's abilities to imitate the facial expressions, gestures and actions of others has recently become a focus for cross-disciplinary studies which draw on psychology, sociology, neuroscience, anthropology, philosophy and other disciplines to try to make sense of this facility (Hurley & Chater, 2005). In this paper, I will argue that the imitative abilities of infants cannot be understood in isolation from the cultural contexts in which they develop. What makes humans so different from the other great apes is not just what individual infants are able to do, but also what adults and infants like to do together. The same evolutionary processes which led to the development of social groups, intentional communication, dance, music and gossip also led us to enjoy conversational exchanges with our children,

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exchanges in which we imitate them as much as they imitate us. The evidence from research on imitation may help early years practitioners, and those who prepare people for this crucial work, to understand the mechanisms at work in our interactions with babies and young children but we should also acknowledge the pedagogical importance of adults' enjoyment of these conversations.

# Shifting perspectives on infant imitation

When Meltzoff and Moore (1977) first presented evidence of newborn babies' ability to imitate facial expressions, notably tongue protrusion, their findings met with an unenthusiastic, even cynical response from a field which was still firmly grounded in a Piagetian model of early infancy. As Meltzoff and his colleagues, Gopnik and Kuhl, later observed (Gopnik et al., 1999), reluctance to acknowledge the active role of babies in communication exchanges may have reflected the fact that, in the 1970s, developmental psychology was very much on the outer fringes of what was still a predominantly male discipline. One can understand how men might continue to believe that the first months of life were dominated by reflexes and an essentially passive accumulation of knowledge about the world, but for those who have spent time caring for and engaging with a young baby, this view could feel incompatible with their own experiences. Reddy and Trevarthen (2004) offer the example of Professor Elizabeth Bates who, at a meeting of the British Psychological Society in 1993, admitted that she had been sceptical about the possibility of neonatal imitation until she experienced it first hand with one of her grandchildren. Bates acknowledged that the phenomenological evidence of feeling that her grandchild was indeed engaging her in a form of conversation proved more convincing than any number of published research findings.

While some have been persuaded by the evidence of their own interactions with children, others have been won round by evidence from research in neuroscience—especially since the discovery, by Rizzolatti *et al.* (1996), of 'mirror neurons' in macaque monkeys. Rizzolatti and his colleagues accidentally discovered that specific neurons which fired when the monkeys grasped an object were also activated when the monkeys saw the experimenters grasping ice-cream cones (Trevarthen, 2005). The researchers went on to identify other mirror neurons which fired both when the monkeys performed a specific action and when they observed the same action performed by another monkey, or indeed by a human. Other researchers have gone on to replicate and extend these findings—in humans as well as in monkeys (Fadiga *et al.*, 1995; Decety *et al.*, 1997; Iacoboni *et al.*, 1999). Although there is still much to learn about *how* the mirror neuron system works, it is now generally accepted that it *does* work and research on the physiology of imitation is challenging old assumptions about the distinction between perception and action (Prinz, 2005a) and indeed between self and others (Gallese, 2005).

Ironically, the discovery of the mirror neuron system in monkeys has been accompanied by a growing realisation that imitation can be seen as an almost exclusively human phenomenon (Tomasello, 1999; Donald, 2001; Zlatev, 2002;

Garrels, 2004). As long as we assumed that imitation was a primitive, 'monkey-see, monkey-do' response, we could dismiss it as being too trivial to merit further research. It became much more interesting once we began to understand that adults' and children's imitation of each other's behaviour was almost never seen even in our closest relatives, the other great apes. Mutual imitation might have a key role in the rapid evolution of human culture:

imitation actually leads babies to behave in new ways that are not genetically determined and, in fact, to behave like the adults around them. Imitation is the motor for culture. (Gopnik et al., 1999, p. 167)

Research on other animals has confirmed that several forms of behaviour associated with imitation, have not been recorded in other species, except, sometimes, in individuals which have been reared and intensively trained by humans. Wild animals do not use pointing to show interest (though some apes can be taught to do this) (Corballis, 2002); they do not practise skills (though humanreared bonobos have on rare occasions and Alex, a human reared African grey parrot does practise new words-if these were first taught in the context of social interaction with humans) (Pepperberg, 1999); they do not learn by imitation and neither do they teach (though human-reared bonobos have been seen unsuccessfully attempting to show wild-reared bonobos how to complete tasks) (Donald, 2001). Perhaps most significantly for this paper, no other animals, even those who have successfully been taught to use sign language or tokens to communicate with humans, have ever been observed using these symbol systems to chat with each other (Donald, 2001). The fact that human-reared animals frequently display skills which have never been observed in the wild suggests that pedagogy, the sometimes deliberate and sometimes unwitting efforts of adults to shape the behaviour of their children, may explain why the emergence and persistence of culture has (so far) been unique to human societies. Perhaps as a result of our heightened ability to infer what other people know, think and believe, we have evolved a powerful predisposition to enjoy communing with babies, especially our own, in ways which go beyond the protective care shown by other species: most of us like babies and most babies like to be liked by familiar adults.

# If it acts like me, it likes me

Andrew Meltzoff has continued to research infant imitation for nearly 30 years and has recently summarised the findings that have led him to develop his 'Like me' hypothesis (Meltzoff, 2005). He argues that babies are predisposed to focus their attention on information that matches their own movements, information which is 'like me'. A mobile suspended over a baby's cot can become much more interesting, for example, if it is attached to the baby's leg, so that its movement is contingent on the baby's kicking. Not only will the baby explore and test this contingency with vigorous bouts of kicking and rapt attention, but it may also begin to smile at the mobile (Watson, 1979).

While mechanical devices such as a contingent cot mobile can provide some measure of 'like me' information, the great majority will come not from objects but from people, and not from just any people but specifically from people who are actively and deliberately engaging with the baby (Meltzoff & Moore, 1999). Much as the exaggerated intonation of infant-directed speech can help to make utterances targeted at a baby stand out from the relatively flat contours of ordinary speech between adults, the communicative behaviour of an engaged adult, one who is responding to the rhythm, intensity and style of the baby's own movements is highlighted and marked as particularly interesting by this 'like me' quality. Research by Cohn and Tronick (1983) showed that babies quickly become anxious when this 'like me' information is interrupted, as when a mother withholds engagement cues by adopting a 'still face'. Murray and Trevarthen (1985) also showed that babies' responses to 'live' CCTV images of their mother engaging with them were very different from their responses to delayed or recorded images which still showed their mother engaging with them but now 'out of synch'.

Meltzoff conducted a similar experiment but using real engagement between 14-month-olds and two adults, one of whom actively imitated the child while the other responded contingently (in time with the child's actions) but not performing the same actions as the child (Meltzoff, 1990). The children looked and smiled significantly less at the merely contingent adult than at the more 'like me' one. They also engaged actively with their imitator, deliberately varying their own movements while closely monitoring the adult's response. In another study, after noticing that 6-month-old infants would often look at their mothers and smile after they had successfully imitated an action (making a light come on by touching it with their heads), Meltzoff observed that 'there is a social-game quality to human interaction' (Meltzoff, 2005, p. 59). This has obvious benefits for learning, as it helps to bind adult and child into a mutually rewarding emotional engagement, suffusing learning with an affective component which makes it much more effective as a cultural tool.

Toddlers are not simply learning machines, as some behaviourists (and even some Piagetians) would seem to believe. Their activity, even with inanimate objects but particularly with interested other people, is typically, though not universally and not always to the same extent, emotional as well as 'cognitive' or 'intellectual'. Several studies have shown that babies do not tend to imitate the actions of mechanical devices in the same way that they imitate human models (Meltzoff, 2005). Simon Baron-Cohen (2003) has argued that we are all at different points on a systemising-empathising spectrum, with men being more likely to be predominantly systemisers and women tending to favour empathising.

This suggestion clearly has implications for differences between the parenting styles of fathers and mothers (and for the research interests of male and female developmental psychologists) but it also highlights the fact that even babies may display a wide range of different responses to social stimuli. For a social group as a whole, however, a tendency for most babies to prefer interactions with people who are interested in them, and who display this interest through contingent responses, may confer an evolutionary advantage. As Kinsbourne (2005) points out, it may be

unwise or even dangerous to imitate any and all available models. Infants' choices about how fully they will engage in imitative exchanges seem to be influenced by their awareness of the extent to which a communication partner is 'tuned in' to their own movements, rhythms and vocalisations. There is clearly a systemising component to this ability to detect contingent behaviour but, for most children, this is accompanied by an empathising connection which lifts the experience of reciprocal communication to a different affective level: 'By 14 months, infants undoubtedly know that adults are not under their total control and part of the joy of this exchange is the realisation that although the infant does not actually control the other, nevertheless, the other is choosing to do just what I do' (Meltzoff & Decety, 2003, in Garrels, 2004, p. 20).

The ability of most infants to express their own joy, interest and fascination makes them particularly rewarding conversation partners. More experienced and enculturated adults and older children are captivated by babies' social skills and willingly serve them as tutors, not in mechanical, systemised training, but in delightful conversations fuelled by mutual enjoyment of generously shared interest: 'we would all prefer to be cared for by someone who enjoys our company rather than by someone who acts out of grim duty' (Noddings, 2002, pp.178-9).

# Adults act as social mirrors or cultural editors of infants' actions

In choosing to do just what the infant does, adults, and especially doting parents, hold up a 'social mirror' (Rochat, 2004) to the children with whom they interact. Prinz (2005b) has suggested that this imitative mirroring allows infants to perceive aspects of their own actions that are normally 'filtered out' in the early stages of perceptual processing:

organisms are made for understanding the world surrounding them, rather than for understanding themselves; that is, how their own bodies and their own minds work. For instance, it has long been known that veridical perception relies on mechanisms that subtract, from the total information available, any contributions that are due to the perceiver/actor. (Prinz, 2005b, p. 181)

Our ability to subtract out our own actions allows us to maintain a stable perception of our environment as we move around within it. We can differentiate between perceptual changes resulting from our own movement, such as the saccadic movements made by our eyes as we read, and those which are independent of our actions, such as when an insect flies past us; however:

As a consequence of being mirrored by somebody else, the infant comes to perceive her own actions through the other. It may be such attending to one's own actions through the mirror of somebody else that may counteract and eventually help to overcome the inbuilt mechanism for cancelling the perceiver/actor and her contributions to the world she is perceiving and acting upon. (Prinz, 2005b, p.182)

Recognising our own actions without simultaneously experiencing the familiar flow of proprioceptive feedback about what our bodies are doing may result in a feeling of unease similar to the embarrassment many people experience when they see themselves on video or hear themselves on audio recordings. We can recognise ourselves but what we see or hear *feels* oddly unfamiliar. Toddlers may also show signs of embarrassment when they see themselves in a mirror (Reddy, 2000), but in comfortable, scaffolded interactions with familiar partners, this unease is dispelled by the pleasure that comes from being 'liked'. Because people tend to become entrained by the movements and rhythms of people they like (Dijksterhuis, 2005), being imitated in this way shows us not only that the other person is like me, but also that they like me or, at least, that they are empathising with me. A mirror image or a video recording may copy my actions exactly but it cannot like me.

For most people, being 'liked' or imperfectly imitated by a communication partner is emotionally rewarding (we like being liked), but when babies converse with adults or older children, who are already well versed in the ways of their culture, they also benefit from a powerful mechanism which supports their induction into culturally valued ways of behaving. Affiliation to a particular culture entails a progressive adjustment of one's action and perception processes as a result of differential levels of exposure to 'normal' (relatively frequent) and 'unusual' events. Language learning provides a particularly clear example of this tuning process: 'as children acquire a vocabulary and see the world through the language they acquire, they learn not to see it as well, for a way of seeing is also a way of not seeing' (Eisner, 1990; emphasis added).

When adults engage in conversations or chats with babies, their interpretation of the baby's contributions is inescapably filtered by perception systems which have been tuned by prior exposure to the kinds of experiences associated with a particular culture. A fleeting twitch of the corners of the lips may be perceived as a social smile, prompting the adult to respond with a full, even exaggerated, display of a 'proper' smile. Virtually any vocalisation which begins with a /m/ sound will be inescapably pulled in by a perceptual attractor which will shape the mother's response into 'mum' or 'mama', accompanied by plenty of encouraging, celebratory cues to mark the pleasure and value attached to these sounds. Regardless of their intentions, the cultural tuning of adults' perception processes will tidy and smooth the baby's actions and sounds, assimilating them to a pre-existing cultural template. The adult therefore serves as an 'enhancing mirror' (Trevarthen, 1995, p. 16) in which the infant sees not an exact reflection, but a culturally edited, 'retouched' version of its own actions. It is the combination of reassuring familiarity, resulting from the adult's efforts to affiliate with the baby, and stimulating novelty, resulting from the differences between what the baby does and how the adult responds, which enables babies to pick out valuable information about what matters in this particular cultural context (Parker-Rees, 2004).

# The benefits of repetition with variation: seeing the intention behind the act

Because infants enjoy the companionship and familiarity associated with seeing their own behaviour returned to them with interest, they reward attentive adults with

smiles, laughter and infectious joy, shaping the adults' behaviour even as their own behaviour is shaped by the adults' editing. When adults find a form of interaction that works, they will therefore be more likely to repeat it, giving babies the added benefit of opportunities to find a pattern in a series of familiar, but not identical, repetitions of a successful 'play format' (Bruner, 1983). Adults do not have to start from scratch when it comes to finding what will appeal to babies because they are likely to have been exposed to interactions between other adults and babies—both in the flesh and in books, on TV and in other media. Every culture provides parents with a 'starter kit' of games, such as 'peekaboo', giving and taking, boisterous jiggling and swinging, funny noises and expressions, nursery songs and rhymes, which have survived the rigorous processes of memetic selection as they have passed from generation to generation. Each culture's favoured styles of adult-child interaction, for example, the extent to which the infant's arousal is encouraged or damped down, the degree of animation in voice and gestures and the nature and frequency of physical contact, both emerge from and contribute to the more general behavioural styles characteristic of the culture. Babies adopt, but also adapt, the patterns of behaviour which adults share with them.

Every family has its own microculture of rituals and routines, around mealtimes, bathtimes, bedtimes and playtimes, which offer infants frequent opportunities to repeat familiar, culturally mediated patterns of interaction with a familiar partner. This frequent repetition allows infants to construct mental models or 'general event representations' (Nelson, 1986) that enable them to differentiate between predictable (and therefore uninteresting) events and unexpected, novel or surprising events, which merit more attention: 'We are highly adaptive creatures. The predictable becomes, by definition, background, leaving the attention uncluttered, the better to deal with the random or unexpected' (Ian McEwan, Enduring love, cited in Wilson et al., 2005, p. 5).

One consequence of an increasing ability to predict how other people will behave in a familiar context is that older infants begin to be able to pay more attention to other people's intentions. Gergely et al. (1995, in Gergely, 2002) have shown that by the age of 9 months, infants will even appear to ascribe intentions to animated shapes on a computer monitor. After seeing a small circle moving along and 'jumping' over a rectangle to 'meet' a large circle, they were shown two animations in which the same circles featured, but without the rectangle 'obstacle'. They looked more intently at the animation in which the small circle followed the same path as before (jumping over the place where the rectangle had been) than at the more different animation, in which the small circle moved straight to the large circle. This suggests that the infants were able to make allowances for the ways in which 'reality constraints', such as obstacles, can change the form of action appropriate for achieving a particular goal.

Just as adults perceive infants' actions through the filter of perceptual systems which have been tuned by exposure to a particular culture, so infants repeatedly exposed to daily routines can begin to discriminate between incidental or accidental 'noise' in people's behaviour and 'information' which is worthy of their attention.

Gergely et al. (2002) repeated Meltzoff's experiment in which infants watch an adult who makes a box light up by touching it with her head, except that one group of 14-month-olds saw a slightly modified demonstration. Half of the children saw the unusual action performed by a model who was holding a blanket around her shoulders, so that her hands were not free. Many more children in this group used their hands to press on the box, rather than their heads, suggesting that they were imitating what they understood to be the model's intention, rather than just mimicking the action they had seen. Meltzoff (1995) has also shown that 18-month-olds will imitate an action that a model 'failed' to achieve (e.g. pulling a toy dumbbell apart), rather than simply copying the model's unsuccessful actions.

Other studies have examined the extent to which infants are influenced by a model's explicit verbal cues to differentiate between intended and unintended actions. Carpenter et al. (1998) showed 14- and 18-month-olds an adult who performed two actions on an object, saying 'There!' while performing one and 'Whoops!' while performing the other (the order being varied). After the second action coloured lights, would suddenly turn on. All of the infants imitated the 'intended' ('There!') action significantly more than the unintended ('Whoops!') one, suggesting that their attention was focused on making sense of what the model was 'trying' to do rather than simply repeating what the model did. Want and Harris (2001) also used a verbal cue, 'Oops!', when showing older (2.5 and 3.5 years) children how a toy figure could be removed from a tube by means of a stick. Pushing the stick down one end of the tube would push the figure into a trap, pushing from the other end would successfully push the figure out. Showing the wrong method, saying 'Oops!', and then showing the right method proved to be significantly more effective (for the older children) than just showing the correct method or a control condition in which the stick was moved outside the tube. A later, similar study allowed Harris and Want to show that a single exposure to the incorrect method ('Oops!') followed by the correct method was significantly more effective than repeated independent trial and error (Harris & Want, 2005).

While these studies do show how infants might derive pedagogical benefits from social cues that help them to filter irrelevant actions out of their imitations, they still suffer from the shortcomings identified by Donaldson (1978), in her criticism of Piaget's clinical experiments. When children are taken to laboratories and exposed to carefully controlled and systemised peculiar events, they may reveal something about how their minds work in this sort of isolated context, but we should be wary about assuming that this is how their minds will work in the more normal context of lively interaction with familiar confederates.

# Emotions of companionship: conditions for playful exchanges

In real-world contexts, interactions with other people are suffused with emotional significance as we carefully monitor not just what other people do but also how they react to what we do and to what other people do. As Reddy and Trevarthen (2004) have observed, from the age of about 6 months infants become considerably more

self-conscious than neonates about their participation with others in imitative engagements. As they turn from self-absorbed fascination with the development of control over their bodies to a new interest in whatever interests their communication partners (evidenced in social referencing and joint attention), they also become acutely aware of how their own actions are appraised by others:

Cultural learning and everything to do with education and shared artificial knowledge and skills involves communication in relation to a joint and mutual experience of the world of objects, and that is where you get these very powerful emotions of pride, which reflect the appraisal of other persons—pride in knowledge and pride in skill, and shame in not being thought master of such things, to be thought unskilled or ignorant. These emotions of companionship are crucial in the development of happy self-confidence at any age. (Trevarthen, 2005, p. 97)

There are interesting parallels between these emotions of companionship and the cues used by Carpenter et al. (1998) and Want and Harris (2001); 'There!' can be seen as marking pride in successful action and 'Whoops!' signals a degree of embarrassment or shame when an intended outcome is not achieved. But these exclamations are no more than vestiges of much more powerful emotional forces that are particularly associated with infants' confident interactions with familiar and fully engaged partners: 'There is a kind of heroic glee in the navigating 6-month-old's spirit—an infectious pride signalled by presentation of previously imitated acts in clever, exaggerated and surprising ways for the appreciation of others' (Trevarthen, 2005, p. 97).

Such joyful inventiveness may play an important part in what makes human culture so adaptable and so responsive to new ideas. Vygotsky (1988, p. 64) argued that: 'The very essence of cultural development is in the collision of mature cultural forms of behaviour with the primitive forms that characterise the child's behaviour; and Donald (2001, p. 153) echoed this idea in his claim that; 'the creative collision between the conscious mind and distributed cultural systems has altered the very form of human cognition.' When fresh new minds collide (and collude) with the cultural systems that shape the behaviour of people around them, they do not simply mimic what they observe. Instead, they find or construct form and structure in the patterning of their experience and, given propitious social contexts, they delight in trying out their personal perspective on other people:

Babies come already 'designed', or 'programmed', to be deeply interested in the people and world in which they find themselves. They are incredibly observant and selective, as well as being extremely clever at interpreting what they witness. They learn best by playing with things they find in their world, and above all by playing with the familiar people who love them. (David et al., 2003, p. 150)

Children do not simply conform to the culture that surrounds them, they perform it (Parker-Rees, 1999), communicating their own interpretation like a musician performing a piece of music. Instead of passively copying what other people do, taking up cultural habits as if they were a uniform, they adapt them, play with them and dress up in them, and, in the process, encourage others to see new possibilities in them. The creative process by which children make sense, rather than simply find it,

appears, however, to be particularly vulnerable to the kinds of social pressures associated with unfamiliar environments or interactions with unfamiliar people.

# Challenges and implications for researchers and professional early years settings

Because child development researchers seldom have time to develop a comfortable familiarity with their subjects, 'heroic glee' is very seldom found in controlled 'laboratory' studies of infant behaviour. With a few notable exceptions from the 1980s (e.g. Tizard & Hughes, 1984; Stern, 1985; Dunn, 1988), and despite a general trend towards the use of sociocultural models for understanding children's development, it is still difficult to find substantial studies which document very young children's participation in their natural habitat. As Engel (2005, p. 36) has observed, 'It is more respectable to study primates in their natural habitat than human children in their homes'.

Even in the best-managed early years settings, it may also be difficult to achieve the depth of shared experience and easy companionship which allows young children to engage in bold, confident social participation. Allocating a key worker to each child can certainly help both parents and babies to build trusting relationships with professional carers (Goldschmied & Jackson, 2004) but this is not sufficient to ensure that staff can regularly 'find time to play, have fun, sing and laugh with young babies' (DfES, 2004, p. 5).

The issues for researchers and for practitioners are linked because lack of experience of babies in their natural environment can lead to cultural assumptions that filter adults' perceptions of what counts as normal infant behaviour. Young professionals whose only contact with children is in settings where staff are too busy to nurture familiar relationships may have little experience of babies' 'full-on' engagement in joyful interactions. When these practitioners come across reports of laboratory studies which have been conducted with emotionally uncomfortable children, they may therefore have little reason to challenge the limited view of children's potential which such studies can promote; and:

If we assume that the infant is unaware of our expectations or intentions we act accordingly: we do not encourage the baby to cooperate with or play with our intentions and expectations, and we do not engage with infants' actions that may be attempts to engage our expectations and intentions. For a playful parent, who enjoys the shared emotions, this does not seem the right way to go. (Reddy & Trevarthen, 2004, p. 14)

One implication for the training and development of early years professionals is that placement experience for the birth-to-3 stage should include opportunities to spend time with parents and babies in home environments, or at least in environments where parents and children can be seen engaging in confident, playful interactions, as well as in professional settings. The English Early Years Foundation Stage (EYFS) consultation document (DfES, 2006) encourages practitioners to 'find out as much as you can from parents and carers about young babies before they join the setting, so that the routines you follow are familiar and

comforting' (p. 40), and to 'find out from parents how they like to communicate with their baby' (p. 44), but valuable though such information may be, I am not convinced that this will be sufficient to 'recalibrate' the perceptual tuning of early years practitioners. Simply spending time with parents and children in a home setting also may not be enough to change the way prospective early years professionals think about the capabilities of babies. Susan Engel (2005, p. 42) quotes a colleague who professed amazement at how little developmental psychologists know about children, 'even when they have some at home', and remember that Professor Elizabeth Bates was only able to recognize babies' ability to imitate when she observed imitation at first hand not with her own children, but with her grandchildren.

It may be, however, that focused observation of babies' interactions with familiar adults in the home environment might help developing early years practitioners to see and feel what babies can achieve, given optimum support. Direct, personal experience of the close, familiar relationship which allows parents to understand and support their young children may also contribute to a greater respect for parents. There is always a danger that the professional development of early years practitioners can result in somewhat critical attitudes to the parenting skills and practices of 'untrained' parents and much work with very young children is in situations where professionals can be seen as 'taking over' from parents. A phenomenologically grounded, experiential understanding of the importance of babies' interactions with familiar adults might help practitioners to see that a very important part of their role is valuing and supporting relationships between parents and children (Barnes et al., 2006). Promoting parents' understanding of the pedagogical value of enjoying their children's company should be an important part of the early years professional's role.

While commercial constraints and pressure of other tasks may make it difficult for early years professionals to re-create the 'attentive love' (Noddings, 2002) which can flourish in the depth of shared experience between parent and child, there is still much that can be done to support the development of empathising as well as systemising skills in early years settings. What such settings lack in opportunities for intimate interactions between a child and a familiar adult can, to some extent, be compensated by greater opportunities for children to practise getting to know each other.

Vivien Gussin Paley (Paley, 2001) has written a short but powerful account of how one teacher, Mrs Tully, used 'doing stories' to help a group of 2-year-olds' to develop their own, shared culture and, in the process, to discover, assert and share their own identities. The children would dictate stories to Mrs Tully throughout the day and then, in the afternoon, they would all gather together to 'do' the stories, in the manner Mrs Tully had learned from Paley's book, Wally's stories (Paley, 1981). This involved Mrs Tully reading the story while the 'author' performed it in front of the other children, sometimes recruiting some or all of them as co-players or props. This was not, however, the end of the story. Once the author had performed, any of the other children could perform their own version of the story and sometimes every child would offer his or her own interpretation, as when the story was just the one word, 'Mama'. As each child performed, they revealed aspects of themselves, as we all do whenever we tell a story in our own way, but they also contributed to the evolution of a shared understanding of the story and of their individual relationships with it, an understanding which became part of the culture of this community of two-year-olds. As Mrs Tully said: 'When my babies do their stories, that's when they really see each other ... that's what we need to go after in school, the seeing and the listening to each other' (Paley, 2001, pp.11–12).

Babies can imitate movements and recognise when their own movements are being imitated but these older children are already imitating stories and observing what is revealed when different people each imitate a story in their own, unique way. Adults engage in social conversation, sharing and responding to anecdotes both as a way of getting to know each other and as a way of maintaining social relationships. Kinsbourne (2005, p. 170) observes that this sort of 'conversing' has a 'powerful affiliative effect that binds people together socially and gratifies them emotionally'. Like Mithen (2005), Kinsbourne suggests that this emotional function of 'entrained' or coordinated interaction developed before the emergence of language; we danced together and sang together well before we started to talk to each other. Indeed, as Rochat (2004) has argued, babies are social creatures well before they are able to construct an individual identity of their own. It is perhaps odd, then, that our understanding of pedagogy is still dominated by a rather narrow, systemising approach to the assembly and profiling of individual intellectual abilities. We have tended to assume that learning by imitation is a one-way process in which the learner obtains information from a more competent model, and in which the relationship between learner and model is of little or no importance. Research on reciprocal imitation with familiar partners reminds us that our delight in the company of other people lies at the very heart of the uniquely human process of intentional pedagogy.

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